

BEAR ADVISORY COMMITTEE MEETING

12/4/2013 Wausau Howard Johnson Hotel

Introductions - Dave MacFarland thanked the Committee for their attendance and work. A summary of discussion topics was provided and included quota recommendations for the 2014 harvest season.

Bear Depredation

Depredation Background - Bob Willging, USDA Wildlife Services.

- A summary of complaints by zone was provided. Overall, it was a slower season for nuisance and agricultural complaints. Generally, there is a peak in the spring when bears immerge from winter dens looking for food, but because of the late winter, the delay in corn planting and maturation, and a good mast crop (soft and hard mast), bear depredations were down.
- Bears typically depredate corn during the milk stage; in Zone B there were some late depredation complaints.
- A table was provided to the Committee regarding bear depredation complaints and bear captures.
- Zone C complaints were typically not higher but there has been an increase in requests from apiaries for assistance.

Depredation Shooting Permits - Brad Koele, Wildlife Biologist, DNR.

- Shooting permits were down slightly from last year as fewer enrollees participated in program.
- Have not received harvest stubs from all counties; claim information (dollar amount) will not be available until at least March.
- Depredation is typically high in Sawyer County, but was down considerably this year.
- A table of enrollment by county was provided. Polk County enrollments increased this year, most likely because people thought they would be initially issued shooting permits whereas Wildlife Services (WS) typically attempts to trap and remove nuisance bears first.
- An update on trap monitoring was provided. Currently exploring the use of trap monitoring devices; a GIS (geographic information systems) device which sends a signal to WS indicating that a bear has triggered a trap. Effectiveness was tested during the initial year and was 100%. The device mounts on top of trap door and when door shuts, a pin is pulled that triggers the device to send an email/text message to the wildlife manager. There is monetary costs associated but in the initial year, the device proved effective and landowners were favorable towards them. There is utility for use in campgrounds where the quick removal of trapped bears is important. The devices eases the burden to farmers who have to drive long distances to check traps. With the use of these devices, WS will be responsible for checking traps in the future. A statutory change would likely be necessary to shift the cost of the device to the producer. There were no theft issues during the initial year. One issue occurred where a pin was pulled intentionally.

Bear Harvest and Population Research Data

2013 Bear Harvest Report - Robert Rolley, Natural Resource Research Scientist, DNR.

- Total reported 2013 harvest to date is 3,805. Tribal harvest was 35. The sex ratio was about equal. Method of harvest was primarily gun. 8,560 permits were issued; success rate was 44%.
- Tables of harvest by zone, success rate by zone, and age structure by zone were provided.

- During 1980-90s, sex ratio of harvest was 60% male, 55% female. Now, nearly equal harvest sex ratio.
- The 20-year success rate is about 55%; this year, statewide success rate (44%) was down from last year (51%).
- A long-term shift to young males in harvest has occurred; from 4 years of age to 3 years. Shifting age structures indicate that harvest has likely decreased the bear population.
- Results are preliminary and bear stubs are continually be submitted from registration stations. Typically, 99% of stubs are submitted by Christmas, so updated data will be available by January.
- There may be some error in harvest method data. Some hunters will place bait but also hunt with hounds. Some hunters may only check one harvest method on stubs, subsequently.

Tetracycline Population Research - Dave MacFarland, Carnivore Specialist, DNR.

- Results are essentially finalized for use although additional tweaking may occur.
- All estimates refer to the summer pre-hunt 2011 bear population estimate of non-cub bears (only adults and yearlings).
- Baits were placed in 2011 (May-June) with good spatial coverage and confidence intervals.
- Received samples from 98% of harvested bears (great data and precision).
- Population estimates: Zone A - 6,009; Zone B - 4,468; Zone C - 4,841; Zone D - 6,425; Zones ABD - 17,403; and statewide - 22,758 bears.
- Study assumptions: year one estimates are biased low and year two estimates are biased high (year one estimate - 18,453; year two estimate - 22,758).
- Cubs that consume bait in 2011 may be harvested in 2012. We calculate those rates and remove them from the analysis assuming they consume baits at different rates than adults. It is difficult to assess how many baits are consumed by cubs because we cannot know how many cubs exist. We thus remove yearling bears from the analysis because they were cubs in 2011.
- The model assumes a closed population; we can correct for births by removing yearlings from analysis, non-hunting caused mortalities are assumed low, emigration is assumed low as the study area (the state) is very large, and the natural survival rate of black bear is high so natural deaths are assumed low.
- The Committee will discuss the continuation of this study next year. A new bear research scientist has been hired from the USGS in Alaska and will start in January, 2014.
- Study costs - \$250,000 to conduct study; materials, staff time, 2 years of analysis, lab work (\$4/sample).

Population Model - Robert Rolley, Natural Resource Research Scientist, DNR.

- A chart of population estimates 1985-present was provided. There have been 3 years of harvest since the start of the most recent tetracycline study.
- Harvest is typically set at 15-20% of the population.
- Overall bait station visitation rates: Zone A - down from last year with decreasing 3-year average; Zone B - slight increase from last year with decreasing 3-year average; Zone C - down from last year with increasing 3-year average; Zone D - down from last year with decreasing 3-year average.

- Models incorporate age and sex structure at harvest, etc., and use 2011 tetracycline estimates to calibrate; fits model to bait station visitation rates. A summary of model fit by zone provided.
- In 2006, bait station hit rates were comparable with the DNRs study and Dave MacFarland's UW research. We can estimate zone-specific hit rates but not those for public vs. private lands. We have info on baits to the ¼ section level. We do not have good geospatial dataset of public hunting lands; limited by MFL and county-owned properties; essentially treated as private lands by the public. Can include a question on hunter survey regarding whether the land of harvest was open to public hunting.
- The sum of biases in the data is most likely to push estimates high; distribution of baits, population closure, equal capture, cubs consuming baits, etc.
- 3 years of record statewide harvests have stabilized the population, but the populations within zones are more complex. 20-25% harvest is known to stabilize a population and statewide harvest for the past 3 years has been in this range.

Harvest Quota Recommendations by Bear Management Unit (BMU)

Quota Recommendations - Bear population and modeling data in this section were provided by Robert Rolley, Natural Resource Research Scientist, DNR, with comments and discussion presented by individual Committee members.

- **The quotas discussed below are the recommendations of the Bear Advisory Committee (BAC). Quota recommendations will be reviewed and approved by the Wildlife Action Team, DNR Secretary, and the Natural Resource Board prior to the 2014 bear permit drawing.**
- Population goals exist for each BMU. It has been a long time since these goals were reevaluated using social science and so views have changed regarding the number of bears on the landscape; less emphasis has been placed on goals. Current population goals listed in Bear Management Plan: Zone A - 4,600; Zone B - 2,200; Zone C - 1,200; Zone D - 3,300. These are pre-hunt population goals, including cubs, and the population estimates presented here were pre-hunt without cubs. Current statewide goal is 11,300. The Bear Management Plan was developed on old data. Once the Wolf Advisory Committee completes the Wolf Management Plan revision (currently being conducted), the BAC will be charged with rewriting the Bear Management Plan.
- Permit availability based on 3-year success rate in each zone.
- **BMU A**
 - Population objectives: stabilize - harvest of 1,000, decrease - harvest of 1,100-1,150, increase - harvest of <1,000. Last year quota: 1,150.
 - Objective over past 4-5 years was to set higher quotas for decreasing this population.
 - Local biologists recommend stabilizing the population or harvest quotas; the Committee agreed with this recommendation.
 - Recommendation of committee: 1,100 quota which equates to about 2,100 permits.
- **BMU B**
 - Population objectives: a harvest of 750 could be used to stabilize the population although caution was recommended. A harvest of 466 led to a slight increase in the population according to the model. Thus a harvest of 600 should stabilize better. A good compromise could be 650-700. Last year quota: 450.
 - Objective last year was to stabilize this population.

- Local biologists recommend stabilizing the population or harvest quotas; the Committee agreed with this recommendation.
- Recommendation of committee: 650 quota which equates to about 1,010 permits.
- **BMU C**
 - Population objectives: a harvest of 1,450 could be used to stabilize the population. Population models and bait station trends indicating the population is growing. Last year quota: 1,200.
 - Last year a Bear Advisory sub-committee decided not to recommend splitting Zone C into two zones. Currently, the bear population is expanding southward. Bear complaints have decrease, likely because people are more accustomed to seeing bears in Zone C.
 - Local biologists recommend that there are still opportunities to increase permits while allowing some population increase while further decreasing nuisance complaints. Generally, people that draw tags focus on areas of Zone C where there are more bears. A quota of 1,350-1,400 would be acceptable.
 - Last year the quota was not met; increasing permits will allow more people the opportunity to hunt. If we increase permits and success rates go down, we will create more opportunity to hunt but less opportunity to harvest. Low success rates may indicate that landowners are not allowing bear hunters to access private lands as they want to preserve bears for their own hunting purposes.
 - Recommendation of committee: 1,350 quota which equates to about 5,100 permits. Higher permit level because success rate was lower last year.
- **BMU D**
 - Population objectives: population model indicates that a quota of 1,400 would stabilize the population. Last year quota: 1,200.
 - Local biologists recommend increasing the quota level. The problem is that hunting pressure has focused on public lands, although with bait setters starting the 2014 season, there may be an opportunity to spread harvest across more private lands. Bear complaints are highest in Zone D. A quota of 1,700 would decrease the population although the harvest may not be achieved.
 - The Committee agreed that the objective should be to decrease the population.
 - Recommendation of committee: 1,600 quota which equates to about 2,250 permits.
- **Statewide Quota Recommendation:** 4,700 quota; 10,460 permits (last year - 8,560 permits). Increase quota of 700, mostly in D.
- **Trends and wait time to draw a permit should be relatively consistent in 2014 compared with 2013.**

Human Dimensions Bear Surveys

Public Survey Development - Jordan Petchenik, Natural Resource Research Scientist, DNR.

- Currently developing two public survey regarding bear population and management so when the Wolf Management Plan is completed (tentatively 2015), the BAC may have completed survey results for consideration in reviewing the Bear Management Plan; a general public survey and a survey for bear hunters.
- Four sample surveys previously provided for consideration; GA, FL, MI, and NC.

- A survey is a tool for evaluating management decisions but it is not a vote for or against specific management objectives.
- The survey budget is \$50,000; low for a survey of this type. No administrative support for a monetary incentive for survey completion; a \$2 reward can increase response rates by 15%. Phone surveys are 3-4x the cost of mail surveys.
- Recommends a survey tailored towards determining the social carrying capacity of bears. Recommends the use of a screener survey, >10,000 and single page max, to determine issues important to the public, how bears impact them specifically, and reasons for not wanting to participate.
- Will use the WAC survey results as an indicator on how to proceed with implementing the general public bear survey.
- This is the first time the DNR will be able to conduct back-to-back public surveys on the opinions of carnivores; a unique cross referencing opportunity exists.
- Next steps; develop a first draft of the survey and develop a sampling protocol.
- Time of year is important as bears are more visible in spring/summer/fall and absent from public view during winter. Survey will be done in summer.
- Summary:
 - **Survey objectives:** social tolerance, bear population trends, experience with and response to bear conflict, and bear range, expansion and contraction.
 - **Target groups:** general public, rural residents, agricultural community, individuals in and out of bear range
 - **Spatial component:** 3 northern units knowing they may change, and split Zone C into 3 parts based on current or future bear densities.

Discussion Items Presented to the BAC

5 Items Presented to BAC for Consideration - Dave MacFarland, Carnivore Specialist, DNR, with opinions provided by individual Committee members.

- 5 items for consideration; 3 from committee members and 2 from the Conservation Congress.
- Statutory changes; the committee may make recommendations to the state legislature.

WI Bear Hunters Association Recommendation

- Combine Class A and Class B fees into one single fee so essentially everyone will have a Class B permit and a preference point.
- Additional revenues earmarked for bear research; general funds currently not adequate.
- One option recommended is to increase application fees from \$3 to \$10 so Class A and B applicants pay the same. With a single fee, all preference point applicants for a given year may participate in all bear hunting activities; use of hounds to track and trail, and bait placement (only Class A permit holders will be allowed to harvest a bear as currently done). A single fee allows more persons to participate without breaking laws.
- Recommendation for residents; non-resident applications would require different rules.
- This requires a statutory change as it is a legislative issue; the Committee will discuss in-depth in the future.

Tag Issuance to Non-profit Organizations

- Recommendation that charitable non-profit organizations be issued an annual permit for donation; Governor's Foundation currently receives a permit each year.

- Requires criteria for identifying suitable organizations. To expand permit donation to adults would require a statutory change; direct permit transfers to adults has rule compliance issues. Transfer mechanism to an organization is likely an easier process.
- Donation of tags with preference point retention for donors is problematic.

Statutory Change Recommendations - Conservation Congress

- Transfer of Class A permits to Purple Heart Recipient on an once-in-a-lifetime transfer.
 - No objections from Committee - can recommend to legislature.
- Close Zone C to bear hound training 7 days prior to the start of bear hunting season.
 - General Committee comments indicate that there is no justification for such a change.
 - Bear behavior naturally turns nocturnal in fall; not due to hound training pressure.

Public Information

- Need to disseminate information the public that it is unacceptable to shoot bears with bird shot; 19 of 26 bears at one meat processor had bird shot in the meat.

Next Meeting

- Generally meet 1 to 2 times per year.
- No date/time will be set for next meeting. Will make accommodations to discuss public bear surveys in the future.